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on: 1/14/2002 by: Edward Timmer

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APPLICATION FOR LETTERS PATENT

for

GRAVITY DRIVEN ELECTRIC POWER GENERATOR

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2004 Jan 14 10:40 AM

GRAVITY DRIVEN ELECTRIC POWER GENERATOR

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FIELD OF THE INVENTION

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This invention relates to electric generators. In the past, a variety of generators where invented to satisfy our growing need for electric power. Such generators included turbine steam generators and water turbines. However, none of the previously invented generators utilized the power of the gravitational force in a self-sustaining manner.

10 Although water turbines harness the power of the falling water, they are not self-sustaining in that they constantly require new volumes of falling water to power the generators. What is needed is an electric generator capable of harnessing the force of gravitational pull of the Earth in a self-sustaining fashion. This type of generator would be capable of producing substantial amounts of electric power without consumption of
15 any external power source such as fuel.

SUMMARY OF THE INVENTION

The present invention represents an electric generator harvesting the power of the gravitational pull of the Earth. The generator is comprised of a platform member, having
20 a horizontal longitudinal axis and means for changing of an angle of orientation of the platform member along the horizontal longitudinal axis. An endless belt is integrated with the platform member, having a drive wheel and an idler wheel. An outer surface of the endless track belt has longitudinally spaced tread members. A means for rotating of the drive wheel of the endless belt is positioned on the platform member, such as a well

known in the art motor to drive rotation of the work wheel. An electric generator housing is slidably mounted on the platform member. The electric generator housing houses almost any kind of a well known in the art electric generator that is similar to a well known in the art water turbine generator. The electric generator housing has at least one
5 axle journalled for rotation between bearings contained in a generator housing, the axle having an external end protruding from a side of the generator housing. A rotor gear is coupled to the external end of the axle, wherein the rotor gear is in mating contact with the tread members of the endless belt.

To initiate operation of the electric power generator, the orientation of the
10 platform member is changed along the horizontal longitudinal axis. The position of the platform member is changed from a flat horizontal position of 0° to a small angle of about 2° - 10° . Such means as a well known in the art support jack is used to change the orientation of the platform member. The change in the orientation of the platform member causes the electric generator housing to slide down along the platform member.
15 Simultaneously with a change in the orientation of the platform member, the rotation of the endless belt is started by activating the means for rotating of the drive wheel of the endless belt. The tread members on the endless belt exert pressure on the rotor gear coupled to the axle, thereby maintaining the electric generator housing on the platform member and preventing it from sliding off from the platform member. Moreover, the
20 resultant rotation of the rotor gear causes rotation of the axle and the rotational work exerted by the axle is converted to an electric current by the turbine generator located inside of the electric generator housing. Therefore, the disclosed design of the generator allows to continuously harness the power of the gravitational pull of the Earth on the

electric generator housing. To increase the output of the generator, one needs only increase the angle of orientation of the platform member. Some of the electric power produced by the generator could be routed to power the means for rotating of the drive wheel, which in turn rotates the endless belt. Therefore, the disclosed generator could be
5 operated in a self-sustaining fashion without a need for an outside energy source.

In a preferred embodiment, a plurality of electric generator housings is positioned on the platform member to harness greater amount of electric power. The electric generator housings could be arranged in tandems, sharing a common axle called a joint axle positioned between the electric generator housings.

10 Therefore, it is the object of the present invention to provide an electric generator powered by the gravitational force.

It is another object of the present invention to provide an electric generator that is capable of self-sustainable electric power production without utilization of an external power source after initial start up of the generator.

15 It is yet another object of the present invention to provide an electric generator that utilizes a plurality of electric generator housings for greater yield of electric power.

BRIEF DESCRIPTION OF DRAWINGS

These and other features, aspects and advantages of the present invention will
20 become better understood with reference to the following description, appended claims, and accompanying drawings where:

FIG. 1 is a top view of one of the embodiments of the electric power generator.

FIG. 2 is a side cross-sectional view of one of the embodiments of the electric power generator at rest, showing some of the key components of the electric power generator.

FIG. 3 is a side cross-sectional view of one of the embodiments of the electric power generator at work, showing some of the key components of the electric power generator.

FIG. 4 is a prospective view of the preferred embodiment of the electric power generator.

DESCRIPTION OF THE INVENTION

This invention represents an electric power generator **50** depicted in **FIGS. 1-4**. A simple and basic structure of the electric power generator is shown in **FIGS. 1-3**. The electric power generator **50** has a platform member **1** with a horizontal longitudinal axis **2** depicted in **FIG. 1**. A means well known in the art, such as support jacks **3**, are used for changing orientation of the platform member **1**. An endless belt **4** is integrated with the platform member **1**. The endless belt **4** is supported by a drive wheel **5** and an idler wheel **6**. An outer surface **7** of the endless belt **4** has longitudinally spaced tread members **8**. The drive wheel **5** is powered by a means well known in the art for rotating of the drive wheel **5**, such as a motor **9**. An electric generator housing **10** is slidably mounted on the platform member **1**. The electric generator housing **10** houses almost any kind of a well known in the art electric generator that is similar to a well known in the art water turbine generator. A plurality of rollers **15**, shown in **FIGS. 2-4**, is located between the electric generator housing **10** and the platform member **1**, thus allowing the

electric generator housing **10** to slide on the platform member **1**. An axle **11** is journalled for rotation between bearings contained in the electric generator housing **10**, the axle **11** having an external end **12** protruding from a side **21** of the electric generator housing **10**. A rotor gear **13** is coupled to the external end **12** of the axle **11**, wherein the rotor gear **13** is in mating contact with the tread members **8** of the endless belt **4**. A frame member **16** coupled to the electric generator housing **10** could be used to give further stability to the electric generator housing **10**, wherein the frame member **16** is slidably positioned on the platform member **1** over rails **17**, where rail members **17** are positioned on the platform member **1**.

To start operation of the electric power generator **50**, the orientation of the platform member **1** is changed along the horizontal longitudinal axis **2**. The position of the platform member **1** is changed from a flat horizontal position of 0° to a small angle of about 2° - 10° . Such means as a well known in the art support jack **3** is used to change the orientation of the platform member **1**. The change in the orientation of the platform member **1** causes the electric generator housing **10** to slide down along the platform member **1**. Contemporaneously with a change in the orientation of the platform member **1**, the rotation of the endless belt **4** is started by activating the means for rotating of the drive wheel **5** of the endless belt **4**. The tread members **8** on the endless belt **4** exert pressure on the rotor gear **13** coupled to the axle **11**, thereby maintaining the electric generator housing **10** on the platform member **1** and preventing the electric generator housing **10** from sliding off from the platform member **1**. In case of an improper operation of the electric power generator **50** where the speed of rotation of the endless belt **4** is not sufficient to keep the electric generator housing **10** on the platform member

1, a bumper stop 14 could be mounted on the platform member 1 to stop the electric generator housing 10 from sliding off the platform member 1.

Most significantly, the resultant rotation of the rotor gear 13 causes rotation of the axle 11 and the rotational work exerted by the axle 11 is converted to an electric current by the turbine generator located inside of the electric generator housing 10 through means well known in the art. Thus, the disclosed design of the electric power generator 50 allows to continuously harness the power of the gravitational pull of the Earth on the electric generator housing 10. To increase the output of the electric power generator 50, one needs only increase the angle of orientation of the platform member 1 with simultaneous corresponding increase in speed of rotation of the endless belt 4 so as to maintain position of the electric generator housing 10 on the platform member 1.

Additionally, one can increase the weight of the electric generator housing 10 to increase the gravitational force exerted on the electric generator housing 10, thereby increasing the speed of rotation of the axle 11, which in turn translates into greater production of electric power by the turbine generator located inside of the electric generator housing 10.

Some of the electric power produced by the electric power generator 50 could be routed to power the means for rotating of the drive wheel 5, which drive wheel 5, in turn, rotates the endless belt 4. Therefore, the disclosed electric power generator 50 could be operated in a self-sustaining fashion without a need for an outside energy source.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The preferred embodiment of the invention is shown in **FIG. 4**. It has essentially all the elements described above with exception of some improvements and modifications described below.

5 In the preferred embodiment, a stand **20** is utilized to support the platform member **1**, while the support jack **3** is used to change orientation of the platform member **1**. Here, the goal is to harness greater amount of electrical power by slidably placing a plurality of electric generator housings **10** on the platform member **1**. The electric generator housings **10** are kept in alignment with respect to each other and the platform member **1** through coupling of the electric generator housings **10** to the frame member **16**. The frame member **16** is slidably positioned on the platform member **1**. Such well known in the art means for slidably positioning the frame member **16** on the platform member **1** as rail wheels **22** and rails **17** could be utilized, wherein the rail wheels **22** are coupled to the frame member **16** and the rails **17** are incorporated into the platform member **1**.

10 Additionally, in the preferred embodiment the electric generator housings **10** are arranged in series where a number of electric generator housings **10** utilize same joint axle **18** journalled for rotation between bearings contained in the electric generator housings **10**. Furthermore, more than one joint axle **18** could be journalled for rotation between bearings contained in the electric generator housings **10**. The rotor gear **13** is located in a central external portion **19** of the joint axle **18**, and joint axles **18** could each have its own rotor gear **13** placed in a mating contact with the tread members **8** of the endless belt **4**. Alternatively, only one joint axle **18** could be coupled to a rotor gear **13**,

wherein translational gears **23** drive rotation of the joint axle **18** lacking a rotor gear **13**. Similarly, the rotor gear **13** could be coupled to the joint axle **18** not through direct attachment depicted in **FIGS 1-3**, but rather through a series of translational gears **23** as shown in **FIG. 4**.

5 By having more than one electric generator housing **10** and more than one joint axle **18**, the disclosed preferred embodiment allows to harness greater amount of electrical power from operation of the electric power generator **50**.

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